



North Carolina Department of Transportation – Division 14 Waste Site – Site Evaluation Checklist

Site Name: U.S. 441 South – Near Tathams Creek Road

Site Location: 35.29386;-83.27013

- ✓ Environmental Evaluation Report
- ✓ Arc GIS Map (With Site Indicated)
- ✓ Site Photos
- ✓ NRCS Web Soil Survey Map
- ✓ State Historic Preservation Office Review
- ✓ NCDNCR – Natural Heritage Program Review

Evaluation Preparer:

DocuSigned by:
Patrick Bredlow
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8/14/2019

**Proposed Jackson County Maintenance Waste Site
U.S. 441 – Near Tathams Creek Road
Environmental Evaluation Report**

Introduction

NCDOT's Jackson County Maintenance will be repairing landslides, doing routine shoulder work and other maintenance activities that will require a waste site for soil and rock. On August 2, 2019, environmental staff evaluated the proposed waste site adjacent to U.S. 441 South near Tathams Creek Road located in Jackson County. This report documents the environmental implications of the proposal.

Location and Physical Description

The proposed waste site (see attached photograph and maps) is located adjacent to U.S. 441 South near Tathams Creek Road located in Jackson County (site center coordinates 35.29386° N, -83.27013° W).

The site is in a previously disturbed fill slope area of U.S. Hwy. 441 (approx. 0.40 acres) adjacent to a mixed forested area and a Duke Energy transmission line. The waste area has various invasive plants and understory plants on it as well as a few mixed hardwoods.

Soils and Wetlands

The Soil Survey of Jackson County classifies the soils on the site as Evard-Cowee Complex (EvD) and Udorthents, loamy (Ud) which are usually well-drained and non-hydric soils. There are no wetland plants or other wetland indicators apparent on the site.

Waters of the U.S.

There are no jurisdictional surface waters located onsite, however, there is a stormwater corrugated metal pipe with a concrete headwall. Savannah Creek (Class C; Tr.), is approximately 0.04 miles south of where wasting and other disturbance will occur on the site. The waste site is also not in a 100-year floodplain (Zone X).

Threatened and Endangered Species

In Jackson County, Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*), gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), Appalachian elktoe (*Alasmidonta raveneliana*), spruce-fir moss spider (*Microhexura montivaga*), swamp pink (*Helonias bullata*), small whorled pogonia (*Isotria medeoloides*), rock gnome lichen (*Gymnoderma lineare*), and northern long-eared bat (*Myotis septentrionalis*, NLEB) are known from current records and are federally-listed as either threatened or endangered.

The waste site does not have suitable habitats for the listed species known in Jackson County.

The site is too low in elevation for northern flying squirrel, spruce-fir moss spider, and rock gnome lichen and is not a deep river gorge with damp rock faces, which is a low elevation habitat where the lichen is occasionally found.

The site is forested, but habitat for small whorled pagonia is absent.

There are no wetlands on the property that could support swamp pink.

The site does not have caves or structures that would be disturbed, so gray bats will not be affected. There are several trees onsite that will be removed. The site is also not in an area designated by the USFWS as where there are known NLEB hibernacula or maternity roosts.

A determination of “**no effect**” for all threatened and endangered species should be applicable to proposed waste site due to suitable habitat lacking, however, due to the need for tree removal, a determination of “**may effect, not likely to adversely affect**” for the Indiana bat. Effective sediment and erosion controls will be used to prevent off-site effects on aquatic habitats.

Archaeological and Historical Resources

The site is in a forested roadside area and will only be used for wasting material. There are no old structures on the site and no known historic resources that might be affected by the disposal of waste at this site. Since the proposed waste site is located in a previously disturbed area from the original Hwy. 441 construction, the NCDOT programmatic agreement for cultural and architecture properties was utilized for waste site screening.

Synopsis and Site Development Measures and Management

Based on available information and the site visit, filling of this site with primarily soil waste will not have adverse effects on streams, wetlands, federally threatened and endangered species, or cultural resources. **To protect aquatic habitat downstream into Savannah Creek, it is PARTICULARLY IMPORTANT that there not be erosion from the site. All tree removal will occur during the “winter clearing” (October 15th – April 15th) moratorium.** Erosion and sedimentation control measures should be in place prior to disposal of waste material to protect aquatic habitats downslope. Measures should be maintained until vegetation has been permanently established.

Submitted: August 14, 2019, By: Patrick J. Breedlove, Division 14 Environmental Specialist II



Aug 6, 2019



North Carolina Floodplain Mapping Program

- Legend**
- Panels
 - Political Areas
 - Stream Centerline
 - Cross Sections
 - Levee
 - Flood Hazard Areas
 - AE
 - Floodway (AE)
 - 0.2 % Chance Annual Flood Hazard
 - Future Conditions 1% Annual Chance Flood Hazard



Jackson County Maintenance Waste Site
U.S. Hwy. 441 – Near Tathams Creek Road

Waste Site Facing North



Waste Site Facing North



Waste Site Facing South



Waste Site Fill Slope

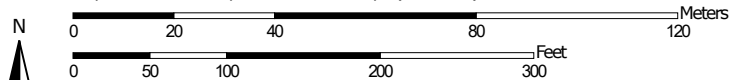


Hydric Rating by Map Unit—Jackson County, North Carolina
(U.S. 441 (Tathams Creek Road))



Soil Map may not be valid at this scale.


Map Scale: 1:1,500 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84







MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)

Soils







Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jackson County, North Carolina
Survey Area Data: Version 14, Sep 10, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 6, 2016—Oct 26, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EvD	Evard-Cowee complex, 15 to 30 percent slopes	0	0.1	18.9%
Ud	Udorthents, loamy	0	0.3	81.1%
Totals for Area of Interest			0.4	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Programmatic Agreement Cultural Resources Screening Checklist

Project Numbers: N/A

FA: N/A

WBS: N/A

Project Name: U.S. 441 Waste Site near Tatham Creek Road

County: Jackson County

Project Description: Waste Site for Jackson County Maintenance Department. NCDOT owned property between U.S. 441 and Duke Energy Power Line.

Funding Source: State

Permits Required: No Permits Required

Instructions

NCDOT Project Managers/Engineers, should complete the following checklist based upon your knowledge of the project site and immediate vicinity. If you check "Unable to Determine", efforts should be undertaken to acquire available information on the project. If the answer to any question is "Yes" or "Unable to Determine," the project is subject to further historic preservation review, notwithstanding other determinations under state environmental review laws and regulations. If the answer to all the questions is "No," the project may be excluded from further historic preservation review.

	Yes	No	Unable to Determine
A. Does this project contain activities that are <u>not</u> specified in Appendix C of the North Carolina Programmatic Agreement for Minor Transportation Projects? (List of Exempt Activities on reverse)		X	
B. Is this project directly related to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
C. Are there properties listed on or eligible for listing on the National Register of Historic Places in the project area?		X	
D. Is this project questioned by the owner of a historic property?		X	
E. Is there known public controversy based on historic preservation issues?		X	
F. Can this project be classified as anything <u>other than</u> a "categorical exclusion" (or state-equivalent) project		X	

Certification

By my signature, I certify that I have completed a site visit or am familiar with the specifics of the project and that my answers to the questions above are, to the best of my knowledge, correct. I also understand that no further environmental analysis is required according to Appendix C of the North Carolina Programmatic Agreement for Minor Transportation Projects.

Patrick J. Breedlove

DocuSigned by:

Patrick Breedlove

8/6/2019

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Name (print)

Signature

Date



Roy Cooper, Governor
Susi Hamilton, Secretary
Walter Clark, Director, Land and Water Stewardship

NCNHDE-9954

August 6, 2019

Patrick Breedlove
NCDOT-Division 14
253 Webster Road
Sylva, NC 28779
RE: U.S. 441 (Tathams Creek Road) Waste Area

Dear Patrick Breedlove:

The North Carolina Natural Heritage Program (NCNHP) appreciates the opportunity to provide information about natural heritage resources for the project referenced above.

Based on the project area mapped with your request, a query of the NCNHP database indicates that there are no records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. Please note that although there may be no documentation of natural heritage elements within the project boundary, it does not imply or confirm their absence; the area may not have been surveyed. The results of this query should not be substituted for field surveys where suitable habitat exists. In the event that rare species are found within the project area, please contact the NCNHP so that we may update our records.

The attached 'Potential Occurrences' table summarizes rare species and natural communities that have been documented within a one-mile radius of the property boundary. The proximity of these records suggests that these natural heritage elements may potentially be present in the project area if suitable habitat exists. Tables of natural areas and conservation/managed areas within a one-mile radius of the project area, if any, are also included in this report.

If a Federally-listed species is found within the project area or is indicated within a one-mile radius of the project area, the NCNHP recommends contacting the US Fish and Wildlife Service (USFWS) for guidance. Contact information for USFWS offices in North Carolina is found here: <https://www.fws.gov/offices/Directory/ListOffices.cfm?statecode=37>.

Please note that natural heritage element data are maintained for the purposes of conservation planning, project review, and scientific research, and are not intended for use as the primary criteria for regulatory decisions. Information provided by the NCNHP database may not be published without prior written notification to the NCNHP, and the NCNHP must be credited as an information source in these publications. Maps of NCNHP data may not be redistributed without permission.

The NC Natural Heritage Program may follow this letter with additional correspondence if a Dedicated Nature Preserve, Registered Heritage Area, Clean Water Management Trust Fund easement, or Federally-listed species are documented near the project area.

If you have questions regarding the information provided in this letter or need additional assistance, please contact Rodney A. Butler at rodney.butler@ncdcr.gov or 919-707-8603.

Sincerely,
NC Natural Heritage Program

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Within a One-mile Radius of the Project Area
 U.S. 441 (Tathams Creek Road) Waste Area
 August 6, 2019
 NCNHDE-9954

Element Occurrences Documented Within a One-mile Radius of the Project Area

Taxonomic Group	EO ID	Scientific Name	Common Name	Last Observation Date	Element Occurrence Rank	Accuracy	Federal Status	State Status	Global Rank	State Rank
Dragonfly or Damselfly	33722	Somatochlora elongata	Ski-tipped Emerald	2004-Pre	H?	5-Very Low	---	Significantly Rare	G5	S2S3
Dragonfly or Damselfly	33784	Stylurus scudderi	Zebra Clubtail	2004-Pre	H?	5-Very Low	---	Significantly Rare	G5	S2?

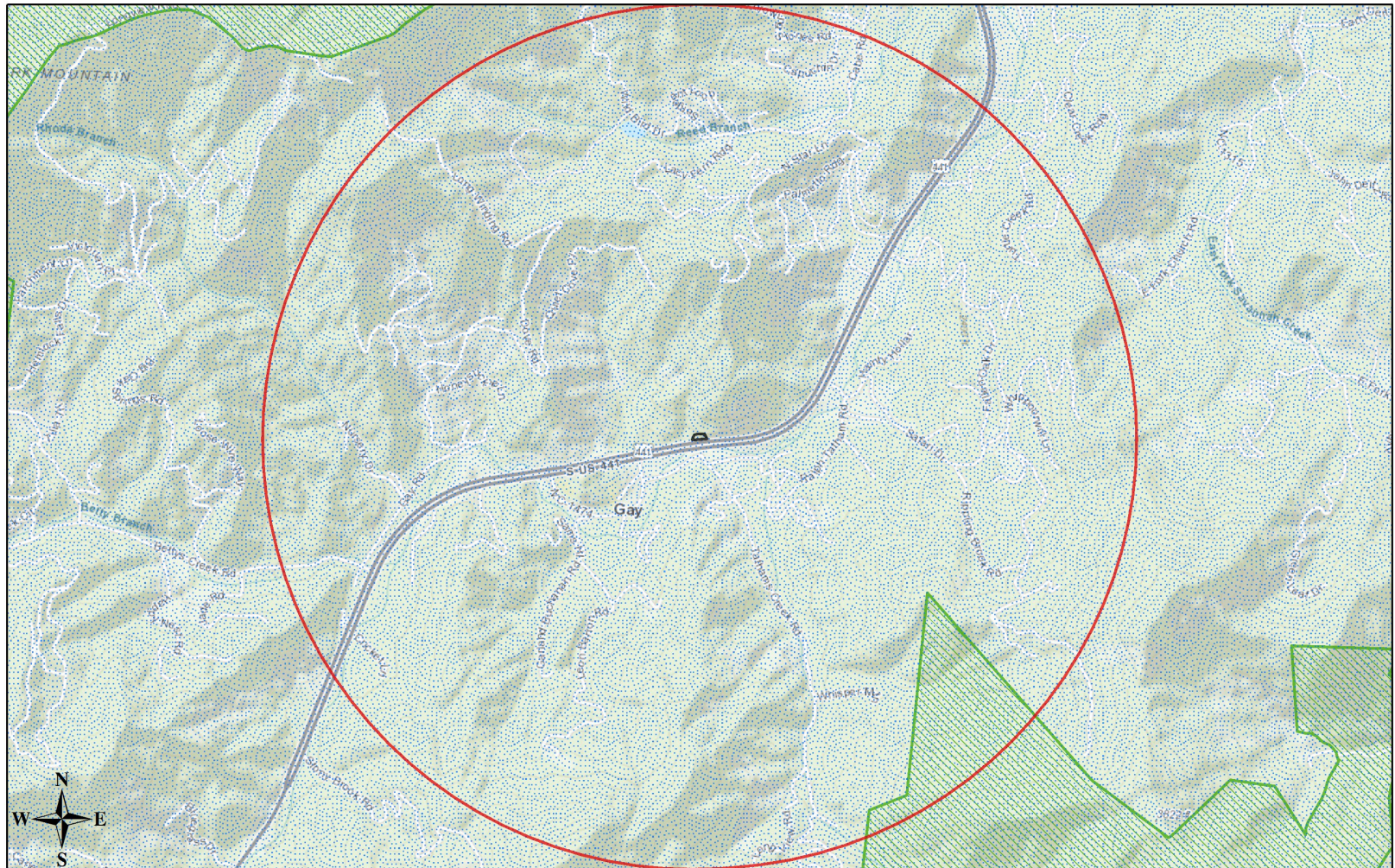
No Natural Areas are Documented Within a One-mile Radius of the Project Area

Managed Areas Documented Within a One-mile Radius of the Project Area

Managed Area Name	Owner	Owner Type
Nantahala National Forest - Nantahala Ranger District	US Forest Service	Federal

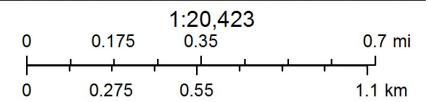
Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/content/help>. Data query generated on August 6, 2019; source: NCNHP, Q3 Jul 2019. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

NCNHDE-9954: U.S. 441 (Tathams Creek Road) Waste Area



August 6, 2019

- Project Boundary
- Buffered Project Boundary
- Natural Heritage Element Occurrence (NHEO)
- Managed Area (MAREA)



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community